



STATE DEPARTMENT OF EDUCATION

P.O. BOX 83720
BOISE, IDAHO 83720-0027

TOM LUNA
STATE SUPERINTENDENT
PUBLIC INSTRUCTION

ISAT Sample Questions: Grade 10 Mathematics

1. Marco bought 7 boxes of plants with 4 plants in each box. Each plant costs \$0.75. He also bought a rosebush for \$11.99. The total cost of Marco's plants is shown in the expression below.

$$7(4)(0.75) + 11.99$$

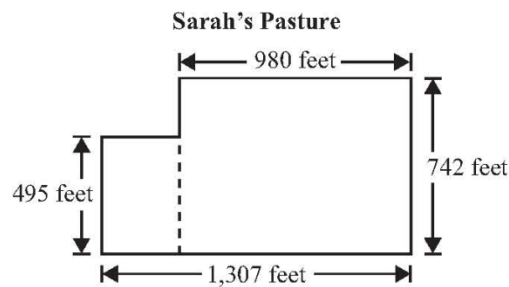
Which is another way to write the expression?

- A. $7(0.75)(4) + 11.99$
 - B. $7(0.75) + 4(0.75) + 11.99$
 - C. $7(4)(0.75 + 11.99)$
 - D. $7(4) + 7(0.75) + 7(11.99)$
2. Use the expression below to answer the question.

$$\frac{2 \cdot 6^2}{3}$$

What is the value of the expression?

- A. 8
 - B. 16
 - C. 24
 - D. 48.
3. Use the figure below to answer the question.





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The figure shows the measurements of Sarah's pasture. The pasture is made up of two rectangles. She put a fence around the pasture. What is the distance, in feet, around Sarah's pasture?

- A. 3,524
 - B. 4,098
 - C. 4,593
 - D. 5,088
4. Chelsea earned \$16 for 2 hours of work. At this rate, how many hours will it take her to earn \$400?
- A. 25
 - B. 50
 - C. 200
 - D. 386
5. Steve practices the piano and trumpet 5 days a week. He practices the piano x minutes each day. He also practices the trumpet y minutes each day. Steve's goal is to practice the piano and trumpet for a total of at least 150 minutes a week. Which inequality represents Steve's goal for practicing the piano and trumpet in a week?
- A. $5x + y \leq 150$
 - B. $5x + y \geq 150$
 - C. $5x + 5y \leq 150$
 - D. $5x + 5y \geq 150$



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6. Which is a linear equation?

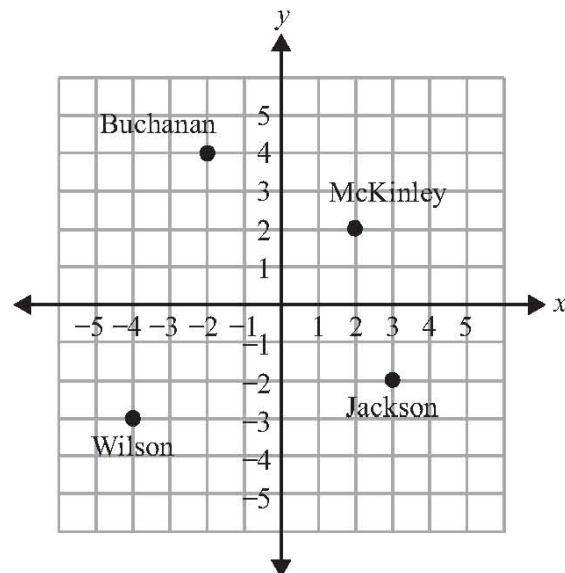
A. $y = 5 - \frac{1}{3}x$

B. $y = 3^x$

C. $y = \frac{25}{x}$

D. $y = x^2 - 2x + 1$

7. Use the coordinate grid below to answer the question.



Four schools are shown on the coordinate grid. Which school is located in quadrant IV?

- A. Buchanan
- B. Jackson
- C. McKinley
- D. Wilson



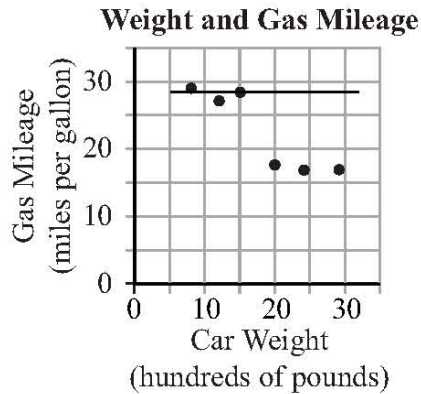
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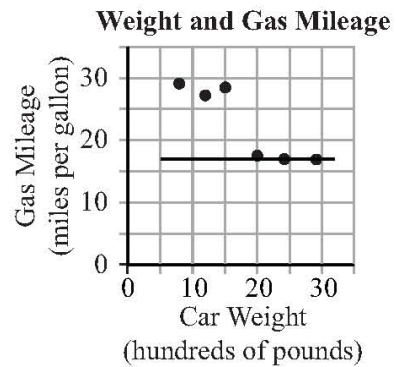
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8. The weights and gas mileages of six cars are recorded on a scatter plot. Which scatter plot shows the line of best fit?

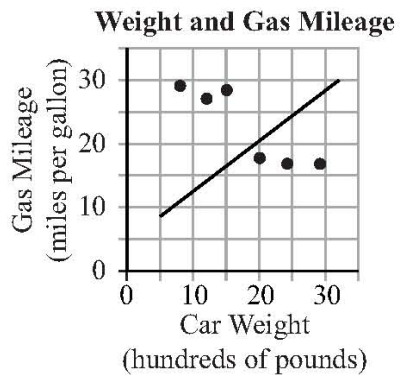
A.



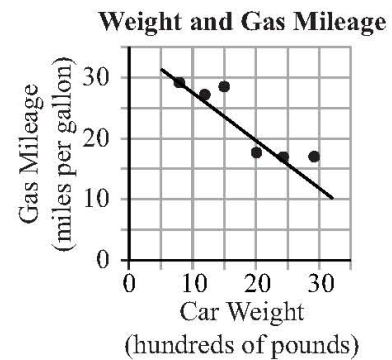
B.



C.



D.



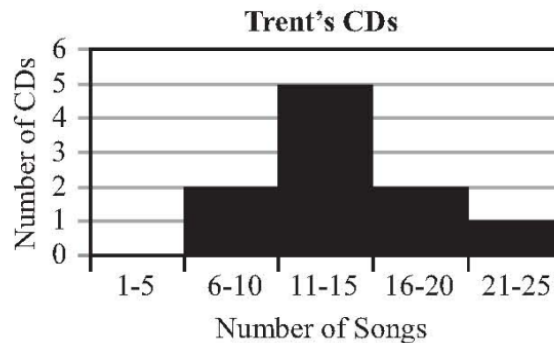


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9. Use the histogram below to answer the question.



The histogram shows the number of songs on Trent's CDs. Which list could represent the number of songs on each of Trent's CDs as shown on the histogram?

- A. 1, 2, 2, 2, 2, 5, 5, 5, 5, 5
- B. 1, 5, 6, 10, 11, 15, 16, 20, 21, 25
- C. 7, 8, 11, 12, 13, 14, 16, 19, 21, 22
- D. 8, 9, 12, 12, 13, 14, 15, 16, 18, 21
10. Brenda programmed her computer to randomly select a desktop picture each time she turns on her computer. Of the 5 pictures the computer can randomly select, 2 are of her dog. What is the **best** prediction for the number of times the computer will randomly select a picture of her dog the next 20 times she turns on her computer?
- A. 2
- B. 4
- C. 8
- D. 10



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ISAT Sample Questions: Grade 10 Mathematics

Question #	Correct Answer	Standard/Goal/Objective
1	A	1.1.1
2	C	1.2.1
3	B	2.1.2
4	B	2.4.1
5	D	3.1.1
6	A	3.3.2
7	B	4.3.1
8	D	4.3.2
9	D	5.2.1
10	C	5.5.1